



CITY OF LINCOLN NEBRASKA

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Re: Bedding Requirements for Flexible Pipe

To: City of Lincoln Spec Book Holders:

We have revised our flexible pipe installation procedure to address the considerable damage occurring to our sidewalks, driveways and pavement both in and adjacent to recently excavated areas. The new specifications limited the compacted lift thickness to a 1 foot maximum lift (from bottom to top of the trench), added 14 inches of crush and run aggregate over the top of all flexible pipe (to reduce deflections in the pipe), required hand tamping next to structures to get better compaction in smaller more confined areas and made 95% of Standard Proctor the minimum trench density, from the bottom of the trench to the top. The new specifications were implemented and several utility contractors have suggested a less expensive alternative which increases the pipe strength and consequently reduced the need for rock bedding without sacrificing backfill quality.

After reviewing the request, we have agreed to the following changes in order to arrive at an equivalent design for sanitary sewer mains and have revised the bedding requirements for all water main pipe. Sanitary Sewer pipes may be installed using SDR 26 Schedule 40 PVC or stronger with a minimum of 6 inches of bedding extending above the top of the pipe or follow the current specification with 18 inches of bedding rock above the top of SDR 35 PVC pipe. The rock bedding for all pressure rated flexible pipes (i.e. C900 or C905) is hereby reduced from 18 inches to 6 inches over the top of the pipe. Lincoln Standard Plans No. 185, pipe bedding has been revised and is attached for your reference.

As a reminder to all who dig in the City's Right-of-way, quality backfill is not verified by a couple of passing density tests, only by the test of time. If improvements are not achieved by the recently implemented procedures, more stringent methods such as clay dams in the trenches, flowable fill around manholes/structures or post testing trenches will be implemented at considerable expense to everyone. Please help us eliminate the need for these measures by doing a better job from bottom to top.

Thanks for your cooperation, if you have any questions please contact me or Bruce Sweney at 441-7711.

Sincerely,

Roger A. Vigard
City Engineer

cc: K. Fredrickson
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